

L. VAN DREZER.
LAMP-CHIMNEY CLEANER.

No. 180,080.

Patented July 18, 1876.

Fig. 1.

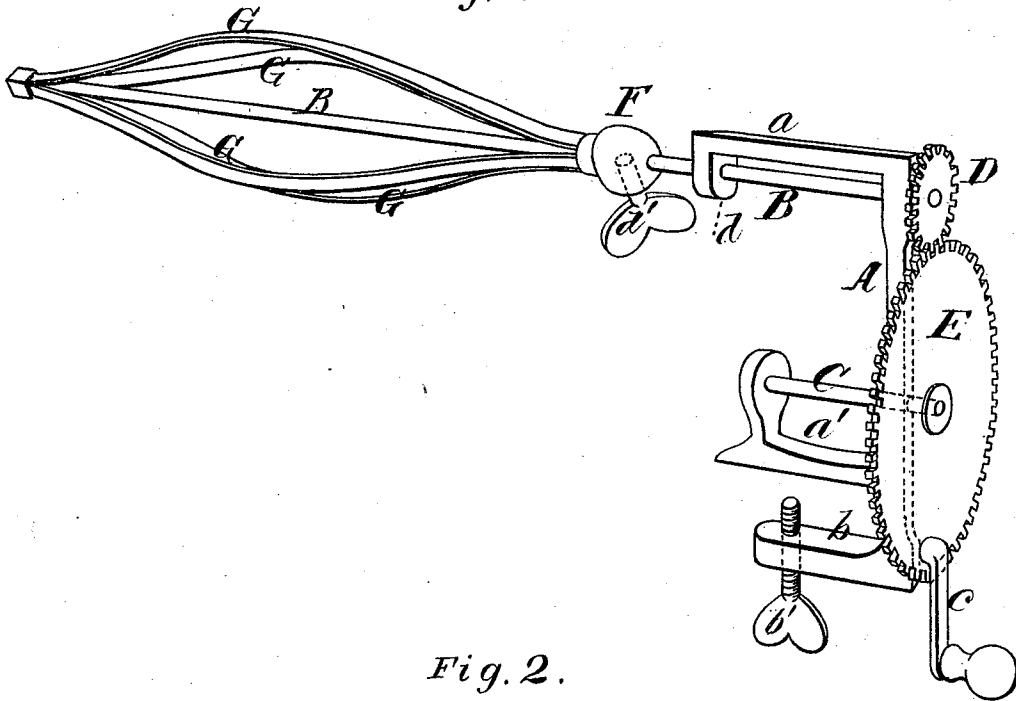
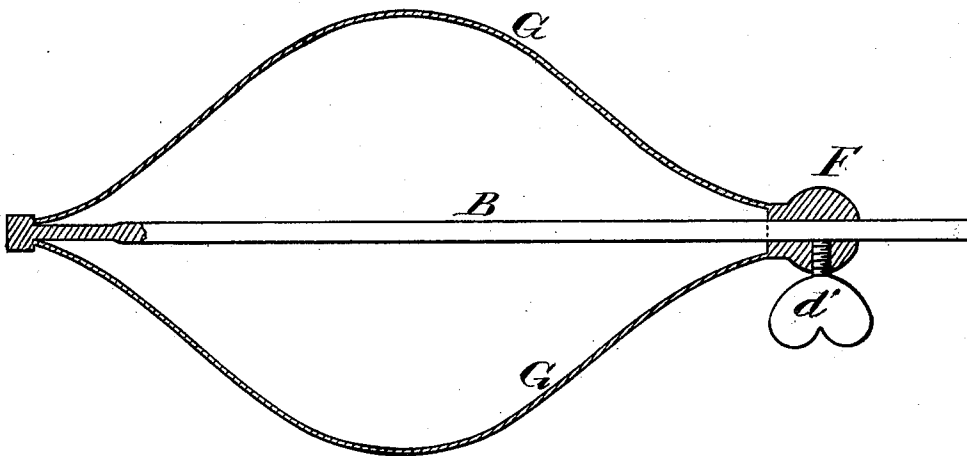


Fig. 2.



WITNESSES
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UNITED STATES PATENT OFFICE.

LUMAN VAN DREZER, OF GRAND HAVEN, MICHIGAN, ASSIGNOR OF ONE-HALF HIS RIGHT TO STEPHEN R. VAN DREZER, OF SAME PLACE.

IMPROVEMENT IN LAMP-CHIMNEY CLEANERS.

Specification forming part of Letters Patent No. **180,080**, dated July 18, 1876; application filed June 3, 1876.

To all whom it may concern:

Be it known that I, L. VAN DREZER, of Grand Haven, in the county of Ottawa and State of Michigan, have invented a new and valuable Improvement in Lamp-Chimney Cleaners; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my improved lamp-chimney cleaner, and Fig. 2 is a sectional view of the expansible strips G and of the adjustable collar.

This invention has relation to improvements in mechanisms for cleaning the interior of lamp-chimneys.

It is well known that lamp-chimneys are liable to become coated upon their insides with smoke or its hard residuum, thus preventing the free transmission of light through them from an ignited wick or burner, which residuum is exceedingly difficult of removal.

The object of my invention is to provide means whereby this residuum may be speedily and effectually removed; and the nature of my invention consists in an expansible rubber applied upon a rotating shaft, and adapted to be passed into a lamp-chimney, the said rubber being then expanded and made to fill up every part of the said chimney, whereby the interior of the latter will be freed of all impurities when the rubber is caused to rotate, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates the supporting-frame of my improved lamp-chimney cleaner, provided with two spaced horizontal arms, *a a'*, and a jaw, *b*, having a set or clamp screw, *b'*, by means of which the device is secured to a table or other suitable support. Arms *a a'* afford bearings for the shafts B C of a pinion, D, and a gear-wheel, E, the latter being provided with a crank-arm, *c*, by means of which motion is imparted thereto and transferred to the shaft of pinion D. Shaft B extends considerably beyond its outer bearing *d*, and is provided with a collar, F, which is adjustable to or from this bearing by means of a set-screw, *d'*.

G represents flexible, preferably metallic, strips, one end of each of which is rigidly secured to the outer end of shaft B, and the other to a collar or sleeve, F. These strips are regularly spaced, and extend completely around shaft B, inclosing it in a species of open cage.

The operation of my improved cleaner is as follows: The chimney to be cleaned is passed over the end of shaft B, the strips G being relaxed by releasing collar F, and being received within the said chimney. The collar is then thrust away from the outer bearing of shaft B toward the chimney, thus causing strips G to expand and fill up the interior of the same, each individual strip being in contact throughout its entire length with the said chimney. If wheel E be now actuated a very rapid rotation will be imparted to shaft B, and the cleaners G and the chimney being held firmly in the hand, its interior will be rapidly freed of all impurities by the friction and scraping of the said strips G thus produced.

In practice, I may, if I so elect, cover strips G with cotton, or other suitable material, in order to facilitate the operation of cleaning out the soot or greasy smoke deposit.

What I claim as new, and desire to secure by Letters Patent, is—

1. The rotary lamp-chimney cleaner, consisting of the expansible strips G, a rotating shaft, to one end of which the said strips are secured, a sliding collar on the said shaft, to which the remaining ends of the strips are secured, and a set-screw for holding the said collar in position, substantially as specified.

2. The expansible cleaner-strips G and shaft B, in combination with pinion D and gear-wheel E, substantially as specified.

3. In combination, the shaft B, gear-wheel E, pinion D, shaft C, adjustable collar F, and flexible strips G, arranged and operating substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LUMAN VAN DREZER.

Witnesses:

WM. N. ANGEL,
F. A. HERRICK.